

S/N Unknown

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Shohei Koide	Examiner:	Unknown
Serial No.:	Unknown	Group Art Unit:	Unknown
Filed:	Herewith	Docket:	109.034US3
Title:	ARTIFICIAL ANTIBODY POLYPEPTIDES		

INFORMATION DISCLOSURE STATEMENT

BOX PATENT APPLICATION
Commissioner for Patents
Washington, D.C. 20231



Sir:

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for review in connection with the above-identified patent application. Pursuant to the provisions of MPEP 609, Applicant requests that a copy of the Form 1449, initialed as being considered by the Examiner, be returned to the Applicant.

In accordance with 37 C.F.R. § 1.98(d), copies of the listed documents are not provided as these documents were previously cited by or submitted to the U.S. Patent Office in connection with Applicant's prior U.S. application, Serial No. 09/096,749, filed on June 12, 1998, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

Applicant respectfully request consideration of these references during prosecution of the above-identified matter. The Examiner is invited to contact the Applicant's Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,
SHOHEI KOIDE
By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 373-6961

Date 11 August 2000 By [Signature]
Ann S. Viksnins
Reg. No. 37,748

Express Mail No.: EL709305975US

Mailing Date: August 11, 2000

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to Box PATENT APPLICATION, Assistant Commissioner for Patents, Washington, D.C. 20231.

Shawn L. Hise
Printed Name

[Signature]
Signature

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U.S. PATENT DOCUMENTS

**Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
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FOREIGN PATENT DOCUMENTS

**Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation Yes No
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OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

**Examiner Initial	
	Barbas, C.D., et al., "Semisynthetic combinatorial antibody libraries: A chemical solution to the diversity problem", <u>Proc. Natl. Acad. Sci. USA</u> , 89 , 4457-4461 (1992).
	Barbas, C.F., et al., "Assembly of combinatorial antibody libraries on phage surfaces: The gene III site", <u>Proc. Natl. Acad. Sci. USA</u> , 88 , 7978-7982 (1991).
	Bianchi, E., et al., "High Level Expression and Rational Mutagenesis of a Designed Protein, the Minibody", <u>J. Mol. Bio.</u> , 236 , 649-659 (1994).
	Bork, P., et al., "Proposed acquisition of an animal protein domain by bacteria", <u>Proc. Natl. Acad. Sci. USA</u> , 89 , 8990-8994 (1992).
	Clarkson, T., et al., "In vitro selection from protein and peptide libraries", <u>Trends in Biotechnology</u> , 12 , 173-184 (1994).
	Clore, G.M., et al., "Structures of Larger Proteins in Solution: Three- and Four-Dimensional Heteronuclear NMR Spectroscopy", <u>Science</u> , 252 , 1390-1399 (1991).
	Davies, J., et al., "Antibody VH Domains as Small Recognition Units", <u>Bio/Technol.</u> , 13 , 475-479 (1995).
	Dougall, W.C., et al., "Antibody-structure-based design of pharmacological agents", <u>Trends in Biotechnology</u> , 12 , 372-379 (1994).
	Ely, K.R., et al., "Common Molecular Scaffold for Two Unrelated RGD Molecules", <u>Protein Engineering</u> , 8 , 823-827 (1995).
	Holliger, P., et al., "Diabodies": Small bivalent and bispecific antibody fragments", <u>Proc. Natl. Acad. Sci. USA</u> , 90 , 6444-6448 (1993).

Examiner	Date Considered
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*Substitute Disclosure Statement Form (PTO-1449)

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OTHER DOCUMENTS

**Examiner
Initial

(Including Author, Title, Date, Pertinent Pages, Etc.)

	Hu, S., et al., "Minibody: A Novel Engineered Anti-Carcinoembryonic Antigen Antibody Fragment (Single-Chain Fv-CH3) Which Exhibits Rapid, High-Level Targeting of Xenografts", <u>Cancer Research</u> , 56 , 3055-3061 (1996).
	Janda, K.D., et al., "Chemical Selection for Catalysis in Combinatorial Antibody Libraries", <u>Science</u> , 275 , 945-948 (1997).
	Koide, S., et al., "Directed Evolution of fibronectin type III domain to novel ligand binding proteins", Dept. of Biochemistry and Biophysics, University of Rochester Medical Center, Rochester, NY 14642.
	Lee, G., et al., "Strong Inhibition of Fibrinogen Binding to Platelet Receptor $\alpha_{IIb}\beta_3$ by RGD Sequences Installed Into a Presentation Scaffold", <u>Protein Engineering</u> , 6 , 745-754 (1993).
	Lerner, R.A., et al., "Using the Process of Reactive Immunization to Induce Catalytic Antibodies with Complex Mechanisms: Aldolases", <u>Acta Chemica Scandinavica</u> , 50 , 672-677 (1996).
	Li, B., et al., "Minimization of Polypeptide Hormone", <u>Science</u> , 270 , 1657-1660 (1995).
	Main, A.L., et al., "The three-dimensional structure of the tenth type III module of fibronectin: An insight into RGD-mediated interactions", <u>Cell</u> , 71 , 671-678 (1992).
	Martin, F., et al., "The affinity-selection of minibody polypeptide inhibitor of human interleukin-6", <u>EMBO J.</u> , 13 , 5303-5309 (1994).
	Martin, M.T., "Commercially valuable catalytic antibodies: The life to come", <u>Drug Discovery Today</u> , 1 , 239-247 (1996).
	Masat, L., et al., "A simpler sort of antibody", <u>Proc. Natl. Acad. Sci. USA</u> , 91 , 893-896 (1994).
	McConnell, S.J., et al., "Tendamistat as a Scaffold for Conformationally Constrained Phage Peptide Libraries", <u>Journal of Mol. Biol.</u> , 250 , 460-470 (1995).
	Pessi, A., et al., "A designed metal-binding protein with a novel fold", <u>Nature</u> , 362 , 367-369 (1993).

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Date Considered

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	Rosenblum, J.S., et al., "Synthetic Antibodies", <u>Antibody Engineering</u> , Oxford University Press, Oxford, 89-116 (1995).
	Suzuki, H., "Recent Advances in Abzyme Studies", <u>J. Biochem.</u> , 115, 623-628 (1994).
	Thomas, N.R., "Hapten Design for the Generation of Catalytic Antibodies", <u>Applied Biochemistry and Biotechnology</u> , 47, 345-372 (1994).

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